



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

KC

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,694	04/26/2005	Rudolf Merkel	3265	2688
7590	03/30/2006		EXAMINER	
Striker Striker & Stenby 103 East Neck Road Huntington, NY 11743			NGUYEN, CHUONG P	
			ART UNIT	PAPER NUMBER
			3663	
DATE MAILED: 03/30/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/532,694	MERKEL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Chuong Nguyen	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 26 April 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-10 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 26 April 2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/26/05</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. For example, the phrase "in particular" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). In addition, the phrase "and/or" is in alternative form, thus, is unclear. Moreover, the term "capability" in claim 1 is a relative term which renders the claim indefinite. The term "capability" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Therefore, the digital signals of the radar sensor and the first evaluation in claim 1 have been rendered indefinite by the terms.

Furthermore, the method as claimed does not contain the steps for performing the method.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Mai et al (EP 0952459). Mai et al. disclose in their abstract a method for evaluating the data from a system for detecting objects in which:

- with the sensors, the radar signals are processed to determine the velocity of a detected object
- the digital signals are processed until a first evaluation capability is obtained as an approach speed signal
- a mode switchover for the evaluation as an approach speed signal is effected for defining which data will be ascertained

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mai et al as applied to claim 1 above, and further in view of Zimmermann et al (DE 10100596).

Regarding claim 2, Mai et al lack the filtration operation to process the signals.

Zimmermann et al teach in the same field of endeavor the method in which the digital signals are processed by means of a median filtration operation (page 2, [0025]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the filtration operation to process the signal, as taught by Zimmermann et al in the method of Mai et al in order to enhance the output signal quality.

Regarding claim 3 and 5, Mai et al lack the distance determination, the background correction of the signals, and the rationalization of the signal thereafter. Zimmermann et al teach in the same field of endeavor the distance determination, the background correction of the signals, and the rationalization of the signal (page 2, [0027]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the distance determination, the background correction of the signals, and the rationalization of the signal as taught by Zimmermann et al in the method of Mai et al to in order to enhance the processed signals.

Regarding claim 4, Mai et al lack a filter for means of filtration operation. Zimmermann et al teach in the same field of endeavor a filter (page 2, [0025], [0027]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a filter for background correction and rationalization of the signal, as taught by Zimmermann et al in the method of Mai et al in order to improve the output signal quality.

7. Claims 6-7, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mai et al as applied to claim 1 above, and further in view of Hyatt (4,686,655).

Regarding claim 6, Mai et al lack the signal gain compensation. Hyatt teaches in the same field of endeavor the signal gain compensation as the summation or integration operations of the input signal portions over a period of time (col. 31, lines 22-26; col. 47, lines 44-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the gain compensation for the signal as taught by Hyatt in the method of Mai et al in order to improve the quality of the signals. It is known in the art that in order to improve signal quality, the gain compensation for the signal is included in order to enhance the signal-to-noise ratio.

Regarding claim 7, Mai et al lack the data compression of the input signal. Hyatt teaches in the same field of endeavor the signals are subjected to data compression (col. 47, lines 62-68, col. 48, lines 1-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the data compression in the method of Mai et al in order for enhancement of the signals.

Regarding claim 10, Mai et al lack a data processing program. Hyatt teaches in the same field of endeavor the program for data processing (col. 59-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a data processing program as taught by Hyatt in the method of Mai et al in order to perform the method or control the storage means.

8. Claim 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mai et al as modified by Hyatt as applied to claims 1 above, and further in view of Li (6,753,780).

Regarding claim 8, Mai et al as modified by Hyatt discloses the circuitry with storage means and computation modules (Fig. 4 and “Description of Figure 4” in col. 56- 59) but lack

the interface controller in which the radar sensor can be connected to the downstream control unit. Li teaches in the same field of endeavor the controller in which the radar sensor can be connected to the downstream control unit (col. 1, lines 60-64; col. 3, lines 30-38). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the controller as taught by Li in the method of Mai et al as modified by Hyatt in order to connect the radar sensor to the downstream control unit.

Regarding claim 9, Mai et al as modified by Hyatt lack the interface controller being constructed such that the data are prepared for connection to a standardized bus system (CAN bus). Li teaches in the same field of endeavor the interface controller being constructed such that the data are prepared for connection to a standardized bus system (CAN bus) (see col. 3, lines 30-68; col. 8, lines 15-18 and lines 32-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an interface controller being constructed such that the data are prepared for connection to a standardized bus system (CAN bus) as taught by Li in the method of Mai et al as modified by Hyatt in order to evaluate the vehicle network data system.

### *Conclusion*

9. The cited prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong Nguyen whose telephone number is 571-272-3445. The examiner can normally be reached on 8:00 - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CN

JACK KEITH  
SUPERVISORY PATENT EXAMINER